

Application No. 10/602,171 - - - - 2

Amendments to the Specification

Please replace the paragraph beginning on page 1, line 19, with the following paragraph:

Some methods of detecting breast cancer are based on the fact that a majority of instances of breast cancer begin begins in the lining of mammary ducts. Studies have shown that fluid within the mammary duct contains high levels of breast cancer markers, and that an estimated 80%-90% of all breast cancers occur within the intraductal epithelium of the mammary glands. Fluid within the breast ducts contains an assemblage and concentration of hormones, growth factors and other potential markers comparable to those secreted by, or acting upon, the surrounding cells of the alveolar-ductal system. Likewise, mammary fluid typically contains cells and cellular debris, or products that can also be used in cytological or immunological assays. Procedures for obtaining such samples include ductal lavage, expression or aspiration of mammary duct fluid, and collection of mammary duct discharge. Ductal lavage comprises the introduction of a rinsing solution into a mammary duct, such as a saline solution or the like, and the collection of the solution along with any cells and cellular debris from the mammary duct.

Please replace the paragraph beginning on page 1, line 33, with the following paragraph:

It is sometimes desirable to increase the yield of cells and cellular debris from a ductal lavage through use of an intraductal brush and a brushing biopsy procedure to loosen and dislodge cellular material from the intraductal epithelium of the mammary glands. In addition to the material that is dislodged and collected through ductal lavage or other methods of duct fluid collection, such material may also be found entrapped on the biopsy brush itself. As such, it is desirable to analyze the material retained on the bristles of a biopsy brush. It is advantageous to be able to submit a vial of fluid collected from a ductal lavage along with the brush tip or head together to avoid any confusion regarding the samples. Typically, however, biopsy brushes have a rigid shaft attached to a brush head that is often made of stainless steel and is difficult to sever with instruments commonly found in a doctor's office because of their strength and resistance to shearing.

Application No. 10/602,171 - - - - 3

Please replace the paragraph beginning on page 3, line 8, with the following paragraph:

FIGURE 2 is a side view ~~is side view~~ of the cytology brush of FIGURE 1 in a mammary duct with an introducer shown partially in section;

Please replace the paragraph beginning on page 4, line 3, with the following paragraph:

An embodiment of a cytology brush 10 is shown in FIGURE 1. Brush 10 comprises a releasable bristle shank 12 having a bristle structure 13 which is constituted by bristle backbone 14 and bristles 16 thereon. In order to lessen the possibility of trauma to a mammary duct, the bristle structure 13 ~~structure 14~~ includes an atraumatic tip 18 that preferably includes a tapered portion 20 and a rounded tip 22. Bristles 16 are also made of a flexible, relatively soft material, such as nylon, which enables brushing of the intraductal epithelium, but does not damage the mammary duct wall itself. Bristles 16 may also have curved ends to further lessen any traumatic effect of the brushing biopsy procedure.

Please replace the paragraph beginning on page 8, line 18, with the following paragraph:

Other variants of a detent are shown in FIGURES 9 and 10. In FIGURE 9, an integrally formed detent having the structure of a hollow dome 544 is shown at the proximal end of brush 510. Dome 544 is made of a flexible material, such as an elastomer, and shaft 520 is slidable relative thereto. Dome 544 is integral with flange 535 ~~flange 555~~ of housing 534. As button 521 is urged to contact dome 544, as shown in FIGURE 9, the practitioner is provided with tactile feedback inasmuch as the dome, when encountered by button 521, provides resistance to the button travel. The encountered resistance provided by dome 544 can be overcome by application of additional force in the axial direction after the shaft 520 is withdrawn from the mammary duct, and the bristle structure is to be released. Dome 544 can be vented, if necessary.